

USACE MILITARY/SFO PROJECT WORK BREAKDOWN STRUCTURE

Business Rules (Revised 11 September 1996)

Summary:

The intent of the standardized Military/SFO Project Work Breakdown Structure (mWBS) is to be able to identify all of the USACE products and services that are required for the execution of a typical Military or Support for Others Project (managed in the military style). This is done by developing a Work Breakdown Structure (WBS) using the standardized mWBS template providing a comprehensive listing of elements, in order to identify, assign responsibilities, and to budget for all costs associated with each product. The Project Delivery Team will then manage the activities and tasks to complete the project scope of work defined by the mWBS.

The standardized Military/SFO Project Work Breakdown Structure (mWBS) provides a hierarchical arrangement of products and services, i.e., mWBS elements, independent of the type of appropriation, i.e., RDT&E, MCAF, etc., that are required by regulation, law, or standard planning/ engineering/construction practices. All of the elements of the mWBS are USACE products and/or services that are independent across the same level, but are all inclusive within the hierarchy. The implementation of the standardized mWBS as a project management tool will guide the Project Delivery Team toward the successful execution of a high quality, on-time, and within budget Military/SFO project.

In addition, the standardized mWBS template provides for a compatible interface between the Corps of Engineers Financial Management System (CEFMS) and the PROject Management Information System (PROMIS). The HQUSACE Mandatory mWBS is comprised of the required items of the standardized mWBS which will be a minimum requirement for all Military/SFO managed projects as appropriate to the project. The Mandatory mWBS elements constitute the minimum WBS for all Military/SFO projects regardless of the size or complexity. No alterations, changes, deletions, or additions can be made to the standardized mWBS within the level in the hierarchy delineated as mandatory; only below. The standardized

structure below the mandatory elements, shown in italics, is provided for the informational use of the Project Delivery Team to assist with defining upper level products by listing what lower level products may, by example, be included in them and to serve as a checklist to ensure no products are overlooked.

Level Descriptions:

Level 1: The highest level of the mWBS is the Project itself. This level is project specific and therefore not included in the standardized mWBS.

Level 2: This level of the mWBS contains the elements that comprise the major product groupings that are produced for a Military/SFO project during its life cycle.

Level 3: This level of the mWBS contains the principal breakdown of elements, subordinate to Level 2, which are discreet products or services independent from each other that constitute its parent element. It is at this level of the mWBS that activities and tasks become easier to delineate; and therefore effectively manage.

Level 4 thru ñ: The fourth and subsequent levels of the mWBS are subordinate elements that are merely a breakdown of parent products, i.e., superior elements, that are developed and/or produced therefore providing for an enhanced management of activities and tasks by the Project Delivery Team.

Generally, the activities/tasks that occur below the lowest level shown in the standardized mWBS are by definition neither products or services that are developed, produced, and/or provided by USACE. These activities are therefore managed via the Network Analysis System (NAS) along with the mWBS elements.

In addition, the mWBS elements are independent of the color of funds using to pay for the product produced or the service rendered. How the products are paid for and how the costs are captured is a function of the financial accounting system, i.e., CEFMS, and the Project Manager's automated interface to CEFMS, i.e., PROMIS. The mWBS elements are also independent of the method of accomplishment and the traditional organizational stovepipes, e.g., Planning, Real Estate, Engineering, etc.

Coding System:

The Corps of Engineers Financial Management System (CEFMS) utilizes the Work Category Table to store the unique identification codes for each element in the mWBS. The field length for the mWBS code is six (6) positions, left justified with zero (0) fill, and uses alpha & numeric characters, e.g., 413A00. The Project

Level, i.e., Level 1, is not coded. CEFMS will manage the funds via a work items category, where the project itself is the highest level of the hierarchy, therefore coding the Level 1 of the mWBS would have been redundant.

The first position of the mWBS code indicates one of the ten (10) Level 2 elements which are coded as follows:

0	-	Program/Project Management Products
1	-	Project Development Documents
2	-	Investigation Products
3	-	Design Procurement Products
4	-	Design Products
5	-	Construction Procurement Products
6	-	Construction Products
7	-	Fiscal Closeout Products
8	-	Operation and Maintenance Products
9	-	Real Estate Products

The second thru sixth position of the mWBS code indicates the Level 3 thru Level 7 elements, respectfully, which may comprise the sub-assembly of products for its superior level element.

PROMIS has the capability to duplicate products within each phase of the mWBS, e.g., having more than one construction contract (work agreement) under one line-item (i.e., DD Form 1391). In addition, PROMIS/CEFMS has the capability to assign the color of money, method of accomplishment, the organization of primary responsibility (OPR), and the work category to each element that comprises the project's mWBS. Therefore this information is independent of the mWBS and is not associated with the mWBS code itself.

In summary, the coding system is used to automate the mWBS in PROMIS and CEFMS and will be essentially transparent to the typical user.

Implementation and Use:

Define and create the Project, in accordance with ER 5-7-1 (FR). This will be "header" information, e.g., the work to be designed and constructed under a line-item, DD Form 1391.

Determine which phases (Level 2's) are required for the project. Any phase that the Project Delivery Team determines to be not a part of the project are not resourced (but are annotated that they are not required), i.e., shown as zero resource in budget, etc. The Mandatory mWBS elements that are not used are not

deleted from the structure since at any point in a project's life cycle, any one or more phases may be subsequently required.

For each phase (Level 2's), determine what products and/or services (Level 3's) must be provided in order to complete the phase in accordance with the project requirements, current guidance, and regulations. If any of the Mandatory mWBS elements are not required, they are so noted.

Determine if there are to be any duplicated product development activities of Level 3 elements in order to accomplish the project. If so, the standardized mWBS can be replicated down from the point of duplication.

For each Level 3 product, the Project Delivery Team needs to determine what subordinate products are required to be identified and subsequently managed by the Team. The detail (read depth) of the mWBS used for any given project will be determined by the level of management emphasis desired by the district policies and procedures and by the Project Delivery Team.

The resulting structure is the basis of the work package which interrelates the "what" of the elements to the "when" and "how much" that is necessary for management control of any task effort. The lowest level elements identified for each hierarchy will therefore need to have an estimate for its cost, a duration for its completion, and an organization within the district assigned as the organization of primary responsibility for its accomplishment.

Using the mWBS, tasks or activities can then be identified within the Network Analysis System (NAS) in order to schedule and monitor the completion of these lowest level elements identified for each hierarchy of products.